

Title (en)

VALVE TRAIN SYSTEM FOR EXTENDED DURATION INTAKE VALVE OPENING

Title (de)

VENTILTRIEBSYSTEM FÜR EINLASSVENTILÖFFNUNG MIT VERLÄNGERTER DAUER

Title (fr)

SYSTÈME DE COMMANDE DE SOUPAPES POUR OUVERTURE DE SOUPAPE D'ADMISSION À DURÉE PROLONGÉE

Publication

EP 3935271 A4 20221214 (EN)

Application

EP 20805539 A 20200407

Priority

- US 201962846415 P 20190510
- US 2020027068 W 20200407

Abstract (en)

[origin: WO2020231547A1] A variable valve timing assembly is provided for extending a duration of an intake valve opening. The variable valve timing assembly includes an intake rocker mounted on a pedestal and operable by a cam lobe to open and close the intake valve. The intake rocker includes a lever extension, and a holding member in the pedestal is lockable in position by a hydraulic circuit in the pedestal to contact the lever extension of the intake rocker and hold the intake valve in the open position. A reset pin in the pedestal is actuatable by the cam lobe to release the holding member to allow the intake valve to close.

IPC 8 full level

F02D 13/02 (2006.01)

CPC (source: EP US)

F01L 1/047 (2013.01 - US); **F01L 1/18** (2013.01 - US); **F01L 1/182** (2013.01 - EP); **F01L 1/24** (2013.01 - US); **F01L 9/10** (2021.01 - EP); **F02D 13/0234** (2013.01 - EP US); **F02D 13/0269** (2013.01 - EP); **F01L 13/06** (2013.01 - EP); **F01L 2001/2444** (2013.01 - US); **F01L 2305/00** (2020.05 - EP); **Y02T 10/12** (2013.01 - EP)

Citation (search report)

- [YA] US 7434556 B2 20081014 - HARMON MICHAEL PATRICK [US]
- [Y] US 9163566 B2 20151020 - LE FORESTIER ROMAIN [FR], et al
- [Y] US 6253730 B1 20010703 - GUSTAFSON RICHARD J [US]
- See also references of WO 2020231547A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2020231547 A1 20201119; CN 113811677 A 20211217; CN 113811677 B 20240308; EP 3935271 A1 20220112; EP 3935271 A4 20221214; US 11698033 B2 20230711; US 2022025825 A1 20220127

DOCDB simple family (application)

US 2020027068 W 20200407; CN 202080034726 A 20200407; EP 20805539 A 20200407; US 202117449992 A 20211005